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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/333,724	06/15/1999	BRYAN C. GEBHARDT	3550	4443

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EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/333,724

Applicant(s)

GEBHARDT ET AL.

Examiner

Jason P Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-4,9,12-14,16-19,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 1,3,5-8,10,11,13 and 20-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/99 through 7/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-26) in the reply filed on 7/26/2004 is acknowledged.

Claim Objections

2. Claims 1, 3, 8, 13 and 20-23 are objected to because of the following informalities:

Referring to claim 1, Line 2 should read "an interactive application" and Line 4 should read "control signals". Appropriate correction is required.

Referring to claim 3, Line 3 should read "termination of".

Referring to claim 8, the repeated word "comprises" must be deleted.

Referring to claim 13, Line 5 should read, "schedule execution of".

Referring to claims 20-22, Line 1 should read "a scheduling system".

Referring to claim 23, Line 9 should read "state machine that transitions".

The examiner also requests that application review the claims for any other possibly typographical error.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1, 3-4, 9, 12-14, 16-19 and 23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dunn et al. (U.S. Patent No. 5,721,829).

Referring to claim 1, Dunn discloses a computer-implemented method of controlling the broadcast and reception of an interactive application (see Column 3, Lines 39-42 for downloading an interactive application when a user tunes to a video-on-demand broadcast channel).

Dunn also discloses receiving control signals that control the broadcast of the broadcast programs (see Column 3, Lines 39-42 for the STB receiving a control signal to tune to the VOD channel, which control the broadcast of the VOD channel broadcast program).

Dunn also discloses determining from the control signals an interactive application associated with one of the broadcast programs (see Column 3, Lines 39-42 for downloading an interactive VOD application when the viewer tunes to the VOD channel broadcast program).

Dunn also discloses generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with the display of the broadcast program (see Column 6, Lines 17-55 for sending a control signal to tune the STB to a non-VOD channel, which pauses the VOD program that was being played on the VOD broadcast program channel, and then resumes play when a user tunes a STB back to the VOD broadcast program channel).

Referring to claim 3, Dunn discloses generating commands to terminate the display of the interactive application in synchrony with the termination of the display of

the broadcast program (see the rejection of claim 1 for pausing the interactive application when the viewer terminates (changes the channel) the operation of the VOD broadcast program channel).

Referring to claim 4, Dunn discloses determining from the control signals a state of the broadcast program (see Column 6, Lines 16-17 for switching from a VOD program to a non-VOD program).

Dunn also discloses responsive to the state of the broadcast program, determining a state of the interactive application (see Column 6, Lines 26-27 for the STB sending a message to the headend acknowledging the pause of the VOD program, which in turn, pauses the interactive application from playing the VOD program until the viewer returns to the VOD broadcast program channel). Therefore, upon the switch to the non-VOD channel, the VOD program and the state of the interactive application, which runs at the STB to control the interactive application, is also paused until the viewer returns to the VOD channel.

Dunn also discloses generating at least one command appropriate to the state of the interactive application (see again Column 6, Lines 26-27 for sending a pause message command to the headend when a viewer changes the channel to a non-VOD channel).

Referring to claim 9, Dunn discloses translating the control signals into a set of commands to an interactive application server (see Column 4, Lines 40-44) for selectively instructing the server to schedule, start, stop and cancel interactive applications for the broadcast programs associated with the control signals (see Column

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6, Lines 17-55 for pausing (stop and cancel) and resuming (schedule and start) a VOD broadcast program according to messages transmitted from the STB to the headend).

Referring to claim 12, Dunn discloses pre-storing and storing the control signals (pause) in a database, which are used to control the broadcast of the VOD broadcast programs (see Column 6, Lines 28-38).

Referring to claim 13, Dunn discloses receiving a prepare control signal to prepare the broadcast of a selected broadcast program (see Column 3, Lines 34-38 for initiating a channel selection control signal to prepare the broadcast of a program on a broadcast channel).

Dunn also discloses determining an interactive application associated with the selected broadcast program (see Column 3, Lines 39-42 for selecting the VOD channel, which determines that an interactive application is downloaded).

Dunn also discloses generating a command to schedule execution of the determined interactive application (see Column 3, Lines 39-42 for downloading and executing the application after the download is complete). Note that the execution is scheduled for when the download is complete.

Referring to claim 14, see the rejection of claim 13.

Referring to claim 16, see the rejection of claim 13 and note that when the viewer switches to a non-VOD broadcast channel, the execution of the interactive application, which plays the ordered video program is paused/cancelled (see Column 6, Lines 17-55).

Referring to claim 17, Dunn discloses determining a type of a broadcast program

for a control signal (see Column 6, Lines 17-19 for determining whether to pause a VOD program upon selection of a non-VOD broadcast channel).

Referring to claim 18, see the rejection of claim 17 for determining a type of the broadcast program, which in turn, determines a type for an interactive application (pause or resume the program for display at the STB at Column 6, Lines 39-55).

Referring to claim 19, Dunn discloses determining a type of broadcast program from a control signal to be a television show (see the rejection of claim 17 for selecting a non-VOD broadcast program).

Dunn also discloses determining a type of interactive application appropriate to the type of the broadcast program (see the rejection of claim 18).

Referring to claim 23, Dunn discloses maintaining for each broadcast program which is associated with an interactive application (see the rejection of claim 1), a first state machine that responds to the control signals transition through states associated with the broadcast program (see Column 6, Lines 17-18 for transitioning from a VOD broadcast program (first state) to a non-VOD broadcast program (second state)), and that generates commands in the selected states related to desired behavior for the interactive application for the state of the broadcast program (see Column 6, Lines 26-33 for generating a pause command upon the change from a VOD to non-VOD broadcast program channel, also note Column 6, Lines 53-55 for generating a resume command when the viewer switches back to the VOD broadcast program channel).

Dunn also discloses maintaining for the interactive application associated with the broadcast program a state machine that responds to the commands from the

broadcast program's state machine that transitions through states associated with the interactive application, and which selectively generates the commands to maintain the synchronous execution of the interactive application with the broadcast program (note that the interactive application plays and resumes the VOD program upon the selection of a VOD and non-VOD broadcast program channel, therefore the interactive application also contains a state machine that transitions through states according to the selection of a VOD and non-VOD broadcast program channel).

4. Claim 24 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dunn et al. (U.S. Patent No. 5,721,829).

Referring to claim 24, Menand discloses controlling execution of interactive applications for television shows and commercials (see Column 6, Lines 53-64).

Menand also discloses generating commands to cause execution of the interactive application associated with the television program (see Column 12, Lines 46-48).

Menand also discloses generating commands to suspend execution of the interactive application during each commercial broadcast during the television show (see Column 13, Lines 15-28).

Menand also discloses generating commands to resume execution of the interactive application when the television program is broadcast after each commercial (see Column 13, Lines 46-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. (U.S. Patent No. 5,721,829) in view of Dunn et al. (U.S. Patent No. 5,648,824).

Referring to claim 2, Dunn ('829 patent) discloses generating commands to maintain execution and termination of the interactive application with the display of the broadcast program on a broadcast receiver (see the rejection of claim 1 and STB 26a in Figure 1), and also teaches that the VOD application includes a browser UI that is displayed in synchrony with the display of a broadcast program (see Column 4, Lines 65-67 and Column 5, Lines 1-7), but fails to teach that the synchrony of the interactive application and the broadcast program is maintained by the generated commands.

Dunn ('824 patent) discloses displaying pause, rewind or fast-forward commands that the interactive application is performing, in synchrony with the broadcast program (see Figures 3 and 8 and Column 7, Lines 63-67 and Column 8, Lines 1-13).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the interactive application, as taught by Dunn ('829 patent), using the interactive application with pause, rewind, fast-forward and play

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display icons, as taught by Dunn ('824 patent), for the purpose of providing a convenient, intuitive video control user interface (see Column 3, Lines 15-16 of Dunn ('824 patent)).

Allowable Subject Matter

6. Claims 5-8, 10-11, 15 and 20-22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Referring to claims 5-7, the prior art of record fails to anticipate or rendered obvious suspending execution of the interactive application, in response to a determination made from control signals that a commercial is being broadcast. Dunn is strictly tied to a video-on-demand system, which does not determine from control signals that a commercial is being broadcast. Menand (of record) discloses executing and suspending execution of an interactive application during a commercial, but does not determine "from control signals an interactive application associated with one of the broadcast program". Note that at Column 13, Lines 15-28, Menand discloses sending a special signaling packet to control suspension and execution of an interactive application when a commercial is broadcast, but this passage does not specify that the special signaling packets are used to "**control the broadcast of broadcast program**", the special signal packets only control termination and execution of an interactive application.

Referring to claims 8, 10-11 and 20-22, the prior art of record fails to anticipate or rendered obvious that the control signals, which are used to create commands to execute and terminate an interactive program, are received from a scheduling server. Dunn is strictly tied to a video-on-demand system, where is the user generates control signals to control the broadcast of programs and determine an interactive program associated with one of the broadcast programs.

Referring to claim 15, the prior art of record fails to anticipate or rendered obvious transmitting a trigger to an interactive application previously transmitted. Dunn only teaches one interactive application transmitted to the user, which is used to request VOD programming. No triggers are sent, and even if a trigger was present, there would be no "previously transmitted" interactive application to transmit the trigger to.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Claims 25-26 are allowed.

The following is an examiner's statement of reasons for allowance:

Referring to claims 25-26, the prior art of record fails to anticipate or rendered obvious that the control signals, which are used to create commands to execute and terminate an interactive program, are received from a scheduling server. Dunn is strictly tied to a video-on-demand system, where is the user generates control signals to

control the broadcast of programs and determine an interactive program associated with one of the broadcast programs.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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January 2, 2005

Jason Baker